A1630-5

Paper, Paperboard & Wood Pulp

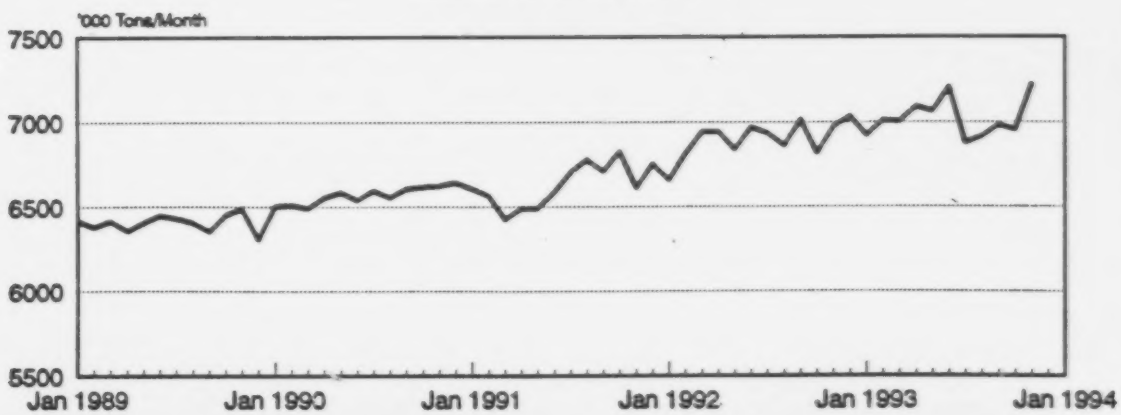
Monthly Statistical Summary - Vol. 71 No. 12 **December 1993**

Although actual production eased, seasonally-adjusted paper and paperboard production advanced to a new record high of 7.2 million tons in November. The trend level of paper and paperboard production, defined as a two-month moving average of the adjusted production rates, also moved up in November, providing further evidence of forward momentum.

Output of the two major industry segments exhibited very different growth patterns during 1993: Paper production dipped sharply in July and then held relatively flat until before increasing in November; paperboard production gained throughout the second half of 1993 in tune with the economy and some firming on the part of exports, particularly in the October-November period.

AF&PA's Capacity Survey, released in December, points to a slowdown in capacity growth relative to its long-term trend. For instance, paper and paperboard capacity is expected to expand at an average rate of 1.9% a year in the 1994-96 period, as compared with long-term growth (1983-93) of 2.5% a year. The Survey, nevertheless, points to brisk growth in the industry's ability to process and use recovered paper. Highlights of the Capacity Survey are presented later in this report.

TOTAL PAPER & PAPERBOARD PRODUCTION
seasonally adjusted



Paper: Seasonally-adjusted paper production advanced in November but remained below its mid-1993 peak. Heightened import competition represented a major constraint to overall paper production last year; consumption growth was considerably stronger than output gains, particularly in the newsprint and printing-writing paper segments.

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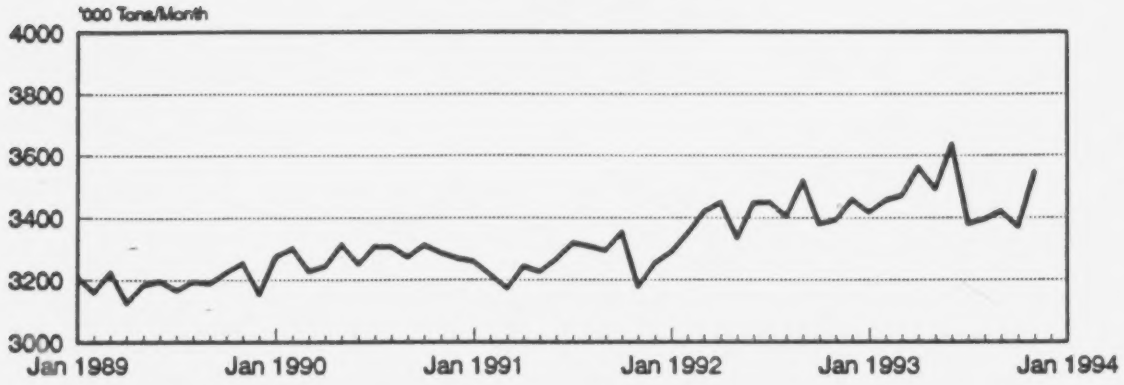
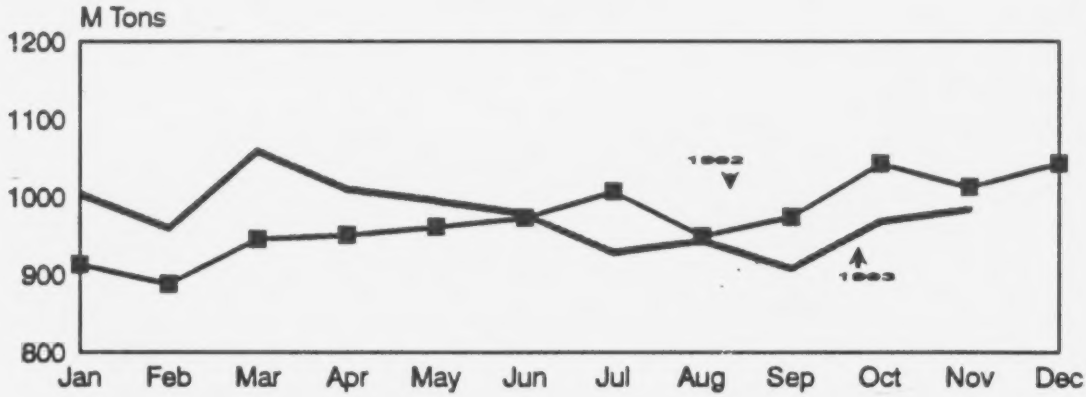
PAPER PRODUCTION
seasonally adjusted



Shipments of newsprint to the U.S. from all sources -- domestic, Canadian, and overseas -- exceeded year-ago levels during the first five months of 1993 but have generally lagged since then. (See chart.) Through November, however, total newsprint shipments to the U.S. market were up 1.2%.

Monthly Newsprint Shipments From All Sources to the U.S.



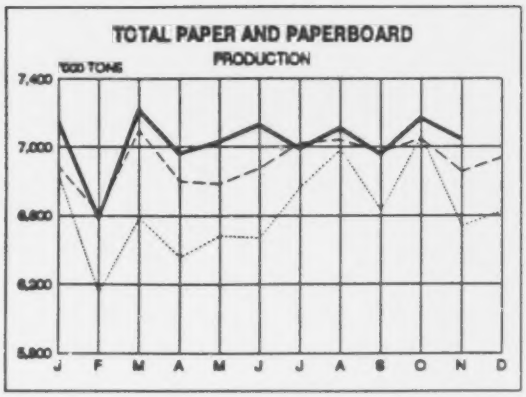
U.S. shipments of newsprint to the domestic market trailed their year-ago volume by 1.4% through November, while Canadian shipments to the U.S. were up 2.5%. These divergent growth patterns caused the U.S. share of total shipments to the domestic market to decline from 50.3% in 1992 to 48.1% during the first eleven months of 1993.

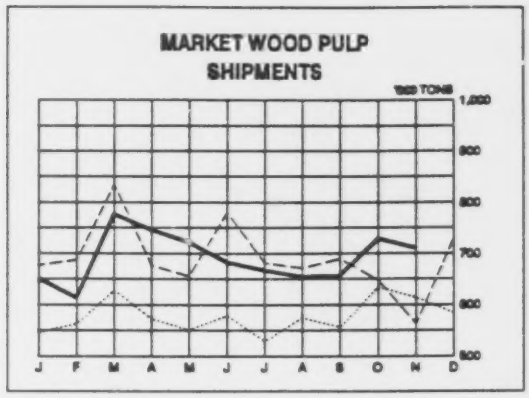
New Supply of the four major printing-writing grades (U.S. shipments plus imports less exports) posted a brisk 5.1% gain through November, although the bulk of the expansion was accounted for by net imports. Domestic shipments were up 1.9% relative to their year-ago level.

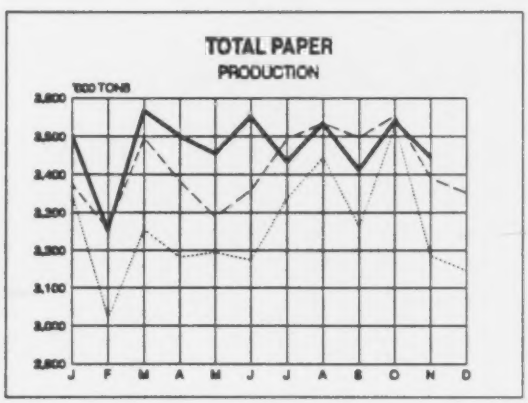
PAPER AND PAPERBOARD STATISTICS PRODUCTION, SHIPMENTS AND ORDERS (Thousands of Tons)	YEAR 1991	YEAR 1992	AUG 1993	SEP 1993	OCT (R) 1993	NOV (P) 1993	Annual Rate Y-T-D 1993	% Change From Same Period Last Year
PAPER								
Newsprint – Production	6,841	7,082	606	572	609	594	7,090	0.0
– Shipments	6,784	7,125	594	593	596	604	7,048	-1.1
Printing & Writing: Total Shipments	22,064	23,394	2,013	1,969	2,014	1,962	23,939	2.2
Groundwood Paper – Shipments	1,716	1,809	137	148	161	147	1,739	5.3
– New Orders	1,717	1,855	139	164	169	134	1,786	7.1
– Unshipped Orders	220	184	171	182	190	189	189	1.0
Coated Groundwood – Shipments	4,040	4,364	347	342	333	347	4,304	-1.1
Coated Free Sheet – Shipments	3,319	3,755	358	335	340	319	3,902	3.8
Total Coated Papers – Shipments	7,358	8,119	706	677	674	666	8,206	1.1
– New Orders	7,342	8,151	676	696	657	613	8,054	-1.2
– Unshipped Orders	891	903	894	892	871	912	912	-89.7
Uncid Free Sheet – Shipments	11,804	12,170	1,044	1,008	1,037	1,011	12,362	1.6
– New Orders	11,487	12,293	1,040	1,017	1,023	982	12,825	2.2
– Unshipped Orders	890	720	881	891	881	837	837	82.4
Thin Papers – Shipments	197	175	10	14	14	13	156	-10.7
Cotton Fiber Paper – Shipments	142	159	14	14	14	13	164	2.3
Bleached Bristols – Shipments	1,146	1,163	103	107	114	112	1,282	10.0
Tissue Paper – Production	5,669	5,784	523	481	518	498	5,993	3.6
Total Packaging & Other Paper	4,509	4,713	392	389	396	391	4,647	-2.1
Unbl. Kraft Paper – Shipments	2,280	2,380	186	186	187	190	2,296	-5.7
Bl. Kraft Paper – Shipments	421	403	39	35	37	34	402	-0.3
Specialty Pkg. Paper – Production	837	887	81	80	87	89	719	4.4
Special Industrial Paper – Production	1,172	1,244	105	108	107	109	1,260	0.7
TOTAL PAPER PRODUCTION – UNADJUSTED	39,082	40,973	3,533	3,411	3,539	3,445	41,669	1.5
TOTAL PAPER PRODUCTION – SEAS ADJ			3,394	3,422	3,371	3,545	41,620	1.9
PAPERBOARD – PRODUCTION								
Containerboard	28,048	29,357	2,455	2,441	2,506	2,492	29,497	0.9
Cont'bd For Dom Use for Fibre Boxes	24,484	25,746	2,171	2,179	2,222	2,177	26,134	1.9
Total Linerboard	17,006	17,785	1,489	1,514	1,562	1,510	18,180	2.5
Unbleached Kraft	16,213	16,850	1,364	1,378	1,424	1,402	16,714	-0.7
Solid Bleached	170	150	13	11	12	13	145	-4.0
Recycled	623	784	113	125	116	95	1,301	75.8
Corrugating Medium	7,479	7,961	682	666	670	667	7,974	0.8
Semichemical	5,487	5,722	496	474	481	476	5,714	0.1
Recycled *	1,992	2,239	186	192	189	191	2,260	1.8
Other Containerboard for Dom Use	301	345	23	25	23	24	312	-9.5
Containerboard for Export	3,263	3,267	282	237	280	291	3,051	-6.2
Boxboard	12,369	12,611	1,121	1,106	1,126	1,107	13,206	4.8
Boxboard for Packaging for Dom Use	7,328	7,390	663	649	643	642	7,717	4.2
Folding Boxboard	5,589	5,651	503	497	500	487	5,914	4.2
Solid Bleached	1,938	1,888	169	165	166	166	1,967	4.3
Unbleached Kraft	1,124	1,143	97	106	97	91	1,196	4.0
Recycled	2,526	2,620	238	226	238	232	2,749	4.3
Set-up Boxboard for Dom Use	275	293	28	24	31	28	309	7.2
Milk Carton & Food Service Dom Use	1,463	1,457	132	127	112	127	1,496	3.5
Other Boxboard for Domestic Use	3,990	4,128	366	377	388	378	4,410	5.8
Boxboard for Export	1,053	1,063	92	80	95	88	1,079	2.8
Paperboard Production by Furnish	40,416	41,968	3,576	3,547	3,632	3,598	42,703	2.0
Unbleached Kraft	20,960	21,656	1,750	1,753	1,818	1,814	21,375	-1.2
Semichemical	5,657	5,902	511	485	493	489	5,882	-0.2
Solid Bleached Kraft	4,572	4,503	398	382	371	387	4,671	1.8
Recycled	9,227	9,906	818	826	880	809	10,876	10.3
Paperboard Production for Export	4,318	4329	354	317	356	380	4,129	-4.0
Unbleached Kraft	3,323	3,320	267	245	273	298	3,151	-4.2
Semichemical	170	180	15	11	12	13	167	-8.7
Bleached Kraft	743	756	63	57	66	62	732	-3.0
Recycled	80	72	9	4	5	8	79	9.1
TOTAL PAPERBOARD PRODUCTION – UNADJ	40,416	41,968	3,576	3,547	3,632	3,598	42,703	2.0
TOTAL PAPERBOARD PROD – SEAS ADJ			3,517	3,556	3,582	3,676	42,632	2.0
PAPER AND PAPERBOARD – UNADJ	79,499	82,941	7,110	6,958	7,171	7,044	84,372	1.8
PAPER AND PAPERBOARD – SEAS ADJ			6,911	6,979	6,953	7,220	84,252	2.0

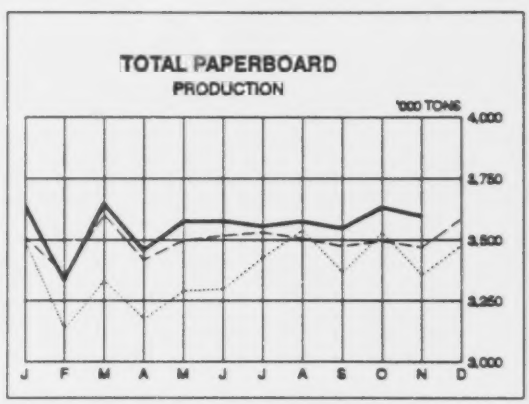
R – Revised P – Preliminary Seas. Adj. – Seasonally Adjusted Unadj. – Not Seasonally Adjusted

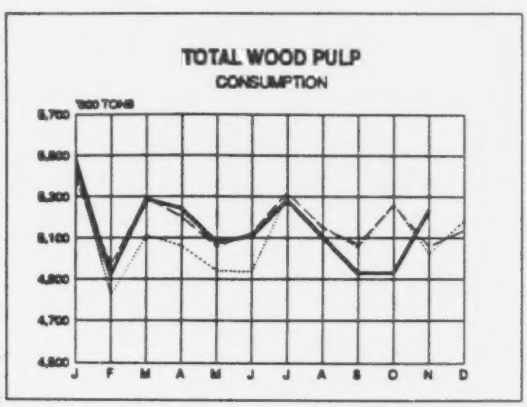
* Container Chip and Filler reclassified into Recycled Corrugating Medium

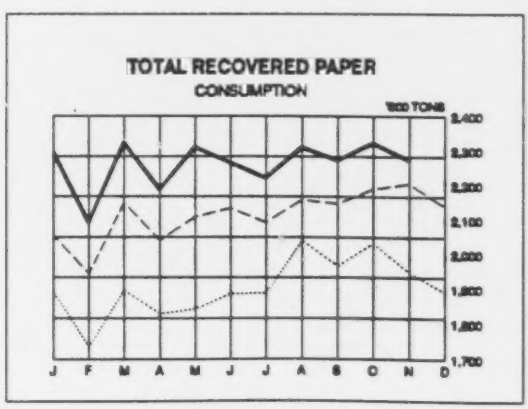












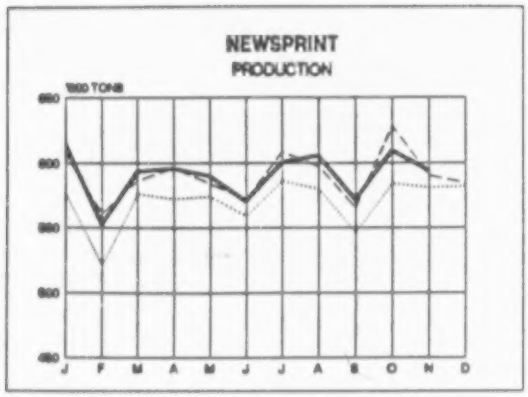
1991 ..... 1992 ——— 1993 ━━━

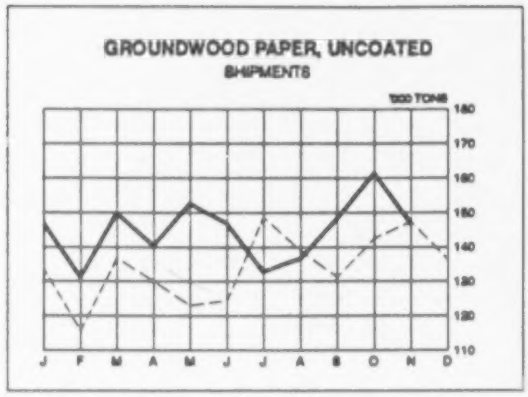
WOOD PULP STATISTICS (Thousands of Tons)		YEAR 1991	YEAR 1992	IVQ 1992	IQ 1993	IIQ 1993	IIIQ 1993	Annual Rate Y-T-D 1993	% Change From Same Period Last Year
TOTAL WOOD PULP									
Total Wood Pulp	Production	62,266	63,960	15,859	15,723	15,647	15,517	62,516	-2.5
(Paper Grades)	Imports	4,824	4,882	1,260	1,400	1,274	1,353	5,369	11.2
	Exports	5,566	6,421	1,490	1,490	1,546	1,387	5,898	-10.3
	New Supply	61,524	62,421	15,629	15,633	15,285	15,482	61,867	-1.0
Paper Grades	Production	51,768	53,358	13,150	13,142	13,084	12,997	52,296	-2.4
Chemical Pulp	Imports	4,504	4,570	1,177	1,280	1,156	1,258	4,924	6.8
	Exports	5,516	6,321	1,447	1,453	1,511	1,371	5,781	-11.1
	New Supply	50,756	51,607	12,880	12,969	12,728	12,883	51,441	-0.4
Groundwood and	Production	6,404	6,501	1,704	1,576	1,555	1,515	6,196	-3.1
Thermo-Mech.	Imports	320	312	83	121	119	95	445	45.7
	Exports	50	100	43	38	35	16	117	54.0
	New Supply	6,673	6,713	1,744	1,659	1,639	1,594	6,524	-1.5
Semi-Chemical	Production	4,094	4,101	1,005	1,005	1,008	1,005	4,023	-2.5
	Imports								
	Exports								
	New Supply	4,094	4,101	1,005	1,005	1,008	1,005	4,023	-2.5
MARKET WOOD PULP									
Paper Grades	Production	7,660	8,670	2,125	2,030	2,048	2,048	8,169	-6.4
Chemical Pulp	Imports	2,816	2,946	726	792	736	788	3,068	4.4
	Exports	5,169	5,906	1,376	1,319	1,443	1,288	5,400	-10.6
	New Supply	5,307	5,709	1,475	1,504	1,340	1,548	5,857	3.7

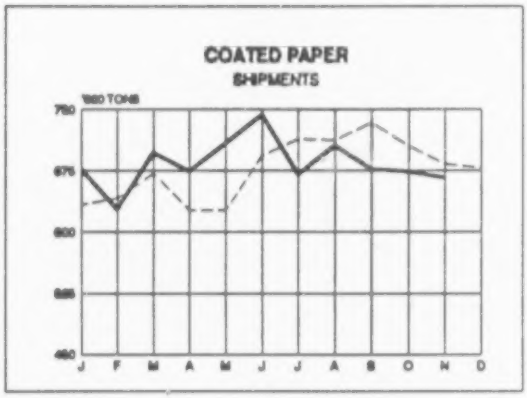
Sources: Total Wood Pulp Production & Market Wood Pulp Production, Imports & Exports - Pulp Division, Pulp, Materials and Technology Group, AFPA. Total Wood Pulp Imports & Exports - Department of Commerce.

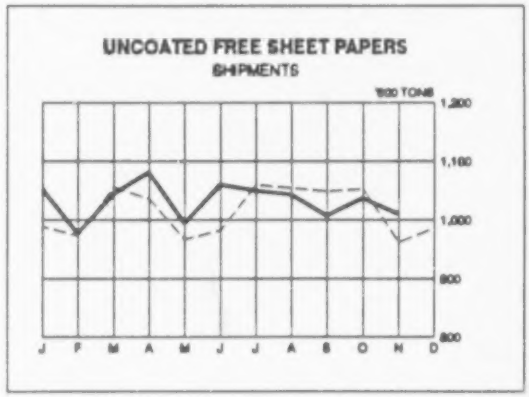
FIBROUS RAW MATERIALS (Thousands of tons)	YEAR 1991	YEAR 1992	IVQ 1992	IQ 1993	IIQ 1993	IIIQ 1993	Annual Rate Y-T-D 1993	% Change From Same Period Last Year
CONSUMPTION AT PAPER & PAPERBOARD MILLS								
Total	84,146	87,366	21,991	22,391	22,190	22,121	88,936	2.0
Total Wood Pulp	61,301	62,011	15,458	15,683	15,429	15,318	61,906	-0.3
Recovered Paper	22,845	25,355	6,533	6,708	6,761	6,803	27,030	7.7
INVENTORIES **								
Chemical Paper Grade Market Pulp								
Producers' Own-Use Inventories	219	228	194	202	205	252	252	10.3
Producers' Market Inventories	518	710	882	872	769	839	839	18.2
Consumers' Purchased Inventories *	451	374	407	450	400	377	377	0.9
Recovered Paper at Paper & Bd. Mills	1,113	1,143	1,147	1,065	1,073	1,062	1,062	-7.1
Days of Supply at Pulp Mills of								
Chemical Paper Grade Mkt Pulp **	23	41	41	38	32	41	41	28.1

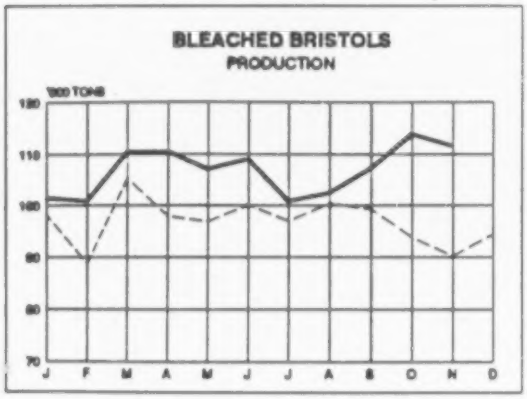
Sources: Wood Pulp Data: Pulp Division, Pulp, Materials and Technology Group, AFPA. N.A. - Not Available
Recovered Paper Data: Paper Recycling Committee, AFPA. * Includes all grades of wood pulp
P - Preliminary; R - Revised; (0) - Indicates zero to five-hundred short tons. ** - End of period.

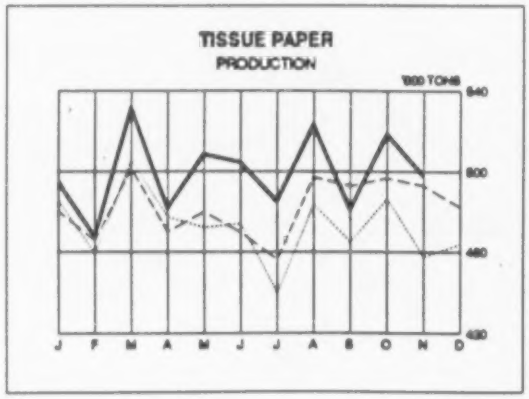












1991 ..... 1992 ----- 1993 ———

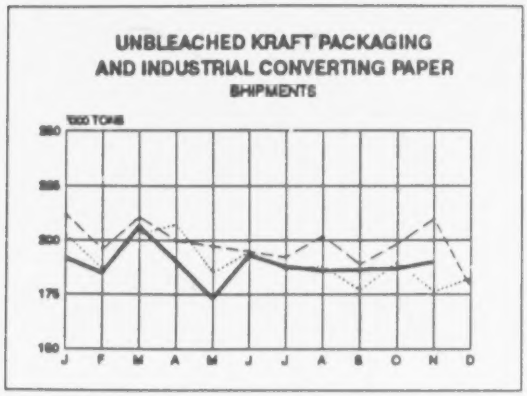
FIBROUS RAW MATERIALS Thousands of Standard (128 Cu. ft.) Cords	YEAR 1991	YEAR 1992	Aug 1993	Sep 1993	Oct 1993	Nov 1993	ANNUAL RATE Y-T-D 1993	% CHANGE FROM SAME PD LAST YEAR
PULPWOOD								
Total U.S. – Total Receipts	99,899	103,891	8,928	8,899	8,880	8,741	105,873	2.9
– Total Consumption	99,242	104,699	8,818	8,547	8,848	8,678	106,023	1.0
– Residues *	34,087	39,784	3,809	3,572	3,849	3,512	43,076	8.7
– Inventories	5,894	5,514	5,457	5,883	5,861	5,433	5,830	2.9
So. Atlantic – Total Receipts	31,296	33,794	2,948	2,899	2,862	2,899	34,880	4.2
– Total Consumption	31,825	34,015	2,882	2,796	2,889	2,819	34,896	2.5
– Residues *	16,166	16,178	1,357	1,231	1,277	1,355	14,609	14.4
– Inventories	1,254	1,199	1,284	1,489	1,514	1,466	1,466	16.7
Northeast – Total Receipts	7,288	7,611	688	689	699	614	7,775	4.8
– Total Consumption	6,840	7,941	649	647	810	651	7,736	8.9
– Residues *	1,707	1,900	148	148	181	140	1,780	-0.8
– Inventories	428	847	814	893	884	826	888	-6.7
South Central – Total Receipts	55,791	58,886	5,798	5,857	5,794	5,794	64,357	4.7
– Total Consumption	56,521	48,868	5,847	5,575	5,840	5,692	48,815	9.1
– Residues *	11,706	15,544	1,476	1,480	1,496	1,486	17,578	14.2
– Inventories	1,857	1,798	1,806	1,884	2,801	2,886	2,886	4.9
North Central – Total Receipts	7,807	7,810	619	606	627	884	7,833	1.8
– Total Consumption	7,913	7,898	611	588	637	690	7,477	2.4
– Residues *	1,187	1,139	88	86	94	87	1,081	-7.3
– Inventories	886	813	884	741	729	884	884	-18.8
West – Total Receipts	14,882	12,781	918	888	887	879	11,427	-11.1
– Total Consumption	18,849	12,947	947	881	920	888	11,807	-10.2
– Residues *	8,884	8,128	699	615	681	605	7,749	-8.1
– Inventories	1,419	1,219	1,249	1,396	1,383	1,329	1,329	1.8

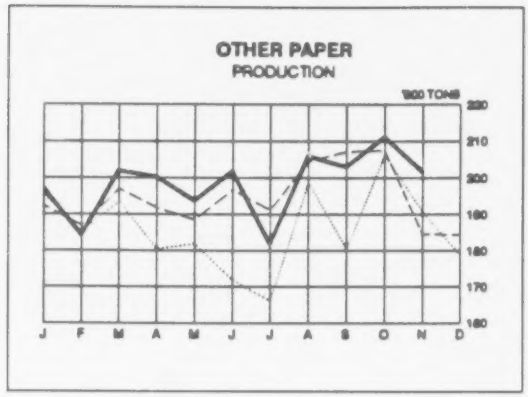
SOURCE: American Pulpwood Association * – Consumption of Residues in cords equivalent

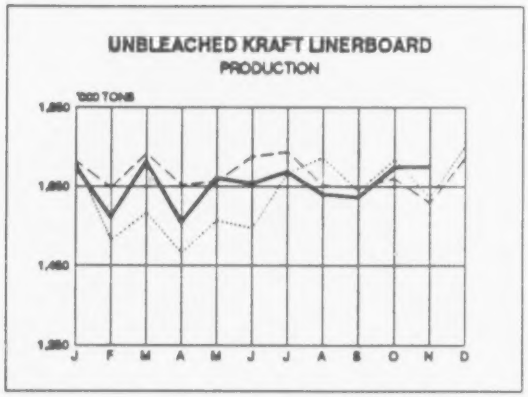
UNITED STATES TRADE WITH CANADA	IMPORTS FROM CANADA YEAR 1992 Tons	YEAR 1992 ($000)	September 1993 Tons	September 1993 ($000)	October 1993 Tons	October 1993 ($000)	ANNUAL RATE Y-T-D 1993 Tons	% CHANGE FROM SAME PD LAST YEAR
Pulpwood, Roundwood (in cubic meters)	0	0	0	0	0	0	0	0.0
Pulpwood chips	610,775	16,578	35,460	1,493	57,299	1,588	592,568	-27.7
Wood Pulp, Total	4,272,013	1,769,416	341,814	118,579	375,096	119,472	4,710,724	10.3
Waste Fibrous Materials, Total	134,916	39,340	10,283	1,488	9,823	1,992	126,944	4.0
Paper, Board & Products, Total	10,842,116	5,977,861	899,811	475,439	894,852	814,817	11,882,294	7.8
Paper, Paperboard, Wet Machine Bd. & Constr. Paper & Bd.	10,696,898	5,469,006	876,796	425,234	870,784	466,878	11,288,886	7.3
Paper, Paperboard & Products	10,691,734	5,947,813	887,980	472,368	893,203	511,824	11,426,930	8.4
Paper & Paperboard, Only	10,519,840	5,462,870	864,845	421,864	868,338	463,065	11,176,301	7.3
Paper, Total	6,679,043	5,130,284	758,889	393,923	677,890	486,938	10,276,193	7.4
Newsprint	7,240,335	3,505,748	557,662	247,842	557,894	282,821	7,457,617	7.5
Printing, Writing & Rel. Pap.	2,085,864	1,894,778	168,487	128,084	213,019	127,821	2,575,348	7.9
Paper. & Ind. Conv. Paper	216,420	191,427	19,981	12,280	15,481	9,838	206,161	-4.1
Special Industrial Paper	89,399	86,842	5,557	3,389	4,782	3,840	82,948	6.0
Tissue Paper	36,881	48,306	3,143	4,238	6,306	4,721	70,948	38.0
Paperboard, Total	946,006	952,576	78,396	38,081	81,386	39,747	991,189	6.2
Convrd Paper&Paperbd Products	289,218	484,943	29,015	50,406	33,369	46,739	362,629	24.4
Wet Machine Board	813	721	19	19	104	82	839	-8.7
Construction Paper & Board	116,436	29,417	11,832	3,204	11,344	2,800	122,525	5.5

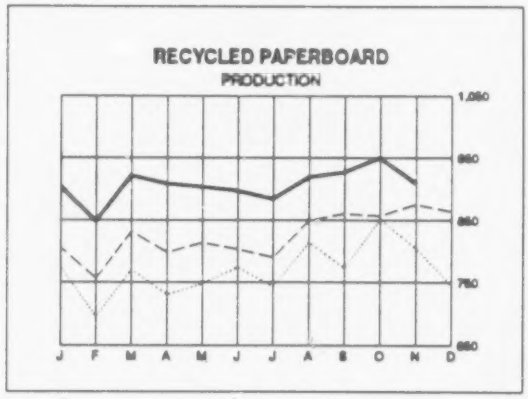
EXPORTS TO CANADA								
Pulpwood, Roundwood (in cubic meters)	2,304,878	69,233	166,818	5,579	172,838	5,356	2,378,951	9.5
Pulpwood chips	384,084	10,839	29,918	1,200	36,089	1,431	387,908	-17.1
Wood Pulp, Total	444,878	145,884	35,194	9,139	35,571	11,382	515,396	-27.0
Chemi Pulp & Other Pulp	11,896	8,758	865	182	877	238	8,182	-44.9
Waste Paper	768,988	115,834	59,089	11,886	100,189	11,800	1,198,068	89.3
Paper, Board & Products, Total	1,899,736	1,832,861	161,867	154,857	148,567	182,579	1,722,808	7.1
Paper, Paperboard, Wet Machine Bd. & Constr. Paper & Bd.	1,164,148	989,482	116,183	96,691	106,569	86,896	1,242,499	7.3
Paper, Paperboard & Products	1,287,987	1,628,318	161,116	154,293	146,106	182,611	1,716,128	7.5
Paper & Paperboard, Only	1,082,947	989,099	100,299	96,987	106,938	94,869	1,206,696	7.3
Paper, Total	867,386	696,351	91,809	57,695	84,992	89,892	975,809	-8.4
Newsprint	94,866	17,241	945	389	849	881	10,199	-88.2
Printing, Writing & Rel. Pap.	486,679	480,145	89,865	89,370	86,486	86,484	486,864	-8.7
Paper. & Ind. Conv. Paper	89,987	48,817	6,289	4,189	4,987	3,918	88,289	-9.8
Special Industrial Paper	87,868	117,486	7,782	12,806	7,411	10,418	87,406	91.0
Tissue Paper	88,874	27,988	2,427	2,366	3,472	3,948	34,872	18.8
Paperboard, Total	455,877	382,748	84,564	36,882	81,578	88,847	857,088	28.4
Convrd Paper&Paperbd Products	444,886	660,219	41,824	87,878	42,178	87,943	480,439	6.7
Wet Machine Board	0	0	0	0	0	0	0	N.M.
Construction Paper & Board	11,039	4,363	871	384	481	167	8,901	-41.4

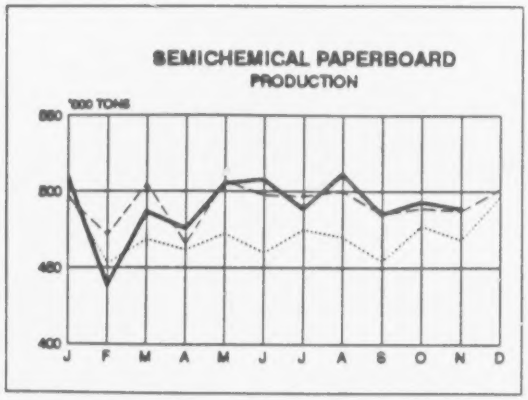
SOURCE: Bureau of Census / Department of Commerce

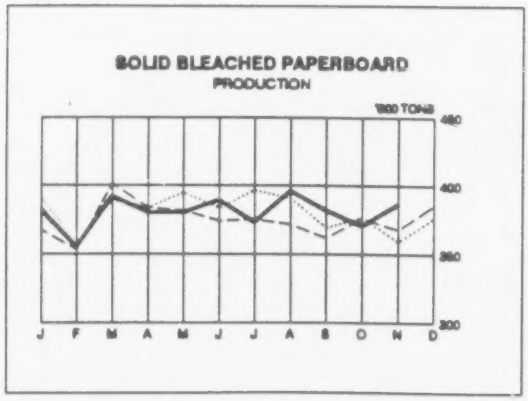












1991 ..... 1992 ----- 1993 ———

PULP, PAPER AND PAPERBOARD IMPORTS	YEAR 1992		September 1993		October 1993		Annual Rate YTD 1993	% Change from same Period Last Year
	Tons	$000	Tons	$000	Tons	$000	Tons (1)	
Pulpwood Roundwood (cubic meters)	0	0	0	0	0	0	0	0.0
Pulpwood Chips	512,961	18,462	124,158	4,080	109,309	2,010	758,590	80.0
Total All Imports	17,731,961	10,028,235	1,573,166	840,118	1,754,095	818,850	18,579,824	11.0
Wood Pulp Total	5,029,302	2,094,235	418,982	136,922	452,161	147,258	5,480,309	5.3
Waste Paper	149,058	27,898	12,588	2,034	10,978	1,709	137,857	-9.0
Other Fibrous Materials	10,340	7,022	896	574	197	131	6,305	-37.7
Paper Board & Products Total	12,542,663	7,899,310	1,140,896	700,588	1,270,761	799,751	13,974,843	12.4
Paper Paperboard Wet Machine Bd. & Construction Paper & Board	12,112,101	6,754,223	1,095,970	596,041	1,222,323	680,635	13,485,718	12.3
Paper Ppbd & Prds ex Cnst&WMB	12,405,877	7,855,513	1,127,256	696,121	1,258,029	785,584	13,833,582	12.5
Paper & Paperboard Only	11,875,314	6,710,428	1,082,526	581,575	1,208,591	648,487	13,344,437	12.4
Paper Total	11,031,198	6,296,038	991,838	544,855	1,112,893	607,909	12,294,989	12.5
Newsprint	7,339,583	3,598,988	667,919	250,320	662,664	287,307	7,821,254	8.4
Printing & Writing	3,173,196	2,100,089	278,291	241,908	419,899	266,813	3,978,848	25.3
Uncoated Groundwood	1,418,885	869,708	189,891	90,789	204,013	117,143	1,734,845	22.0
Coated Print.& Impreg. Pap.	830,064	606,378	113,478	82,992	112,393	83,448	1,143,092	37.8
Uncoated Free Sheet	802,147	600,413	84,207	57,952	82,531	57,825	976,714	22.2
Thin (except Cigarette)	11,821	15,303	809	983	852	902	7,573	-37.3
Bristols	110,290	116,289	10,105	9,843	10,110	8,795	118,825	4.4
Total Pkg & Other Paper	452,286	541,617	37,411	46,897	32,234	45,770	404,300	-12.4
Unbleached Kraft Paper	228,001	108,122	17,836	9,701	13,428	8,914	176,181	-25.3
Other Pkg. & Indust. Paper	224,285	435,495	19,775	37,196	18,806	36,856	228,139	1.1
Tissue	66,130	55,348	8,018	5,829	7,996	8,019	80,787	24.8
Paperboard, Total	944,117	414,388	90,889	36,721	88,997	38,559	1,059,448	11.4
Kraft Paperboard	176,950	89,844	16,575	8,900	23,945	8,174	213,721	22.0
Semi-Chemical Corrugating	148,131	98,790	24,715	8,738	25,797	8,274	256,414	35.7
Other Paperboard	619,036	206,954	47,599	24,083	47,255	24,111	590,313	-7.5
Convtd Paper&Paperbd Products	430,562	1,145,087	44,728	114,548	48,438	119,116	489,125	15.5
Paper Products, Total	304,048	891,733	32,067	88,849	36,535	94,170	360,008	17.5
Paperboard Products, Total	126,515	253,353	12,661	25,697	12,903	24,947	139,117	10.7
Wet machine Board	833	818	43	32	110	87	970	-3.7
Construction Paper & Board E	135,853	42,981	13,401	4,433	12,823	4,071	140,311	5.8
Notes								
Other: No Weight Avail. ($000)		151,879		15,120		18,472	170,170	8.1
Total Imports Incl. Other($000)		10,180,113		855,238		837,321	10,992,173	5.2

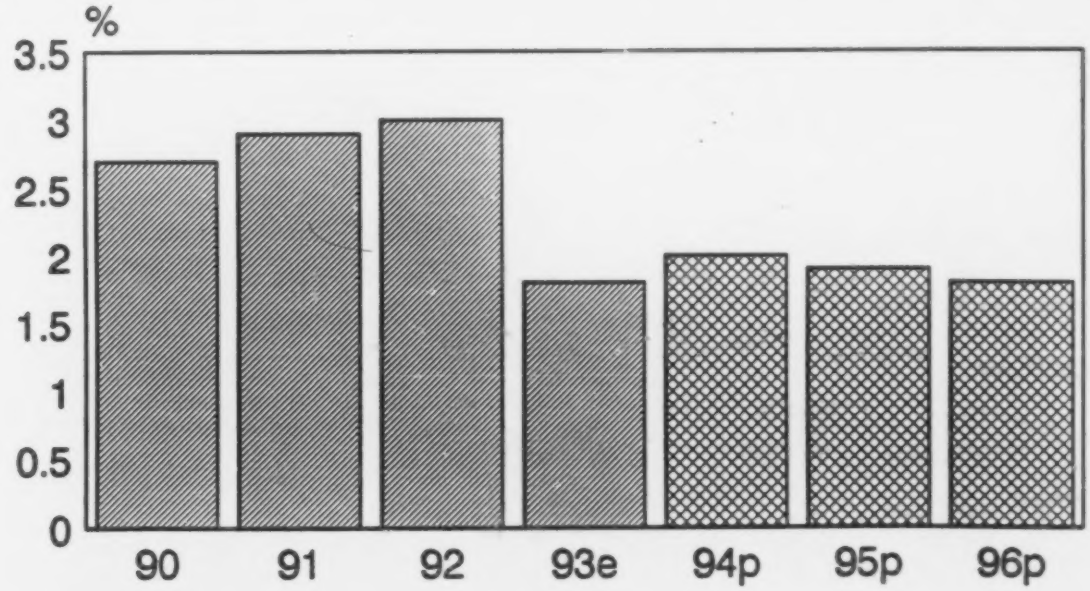
PULP, PAPER AND PAPERBOARD EXPORTS	YEAR 1992		September 1993		October 1993		Annual Rate YTD 1993	% Change from same Period Last Year
	Tons	$000	Tons	$000	Tons	$000	Tons (1)	
Pulpwood, Roundwood (cubic meters)	2,252,713	83,909	203,723	6,967	174,518	5,291	2,346,990	10.0
Pulpwood Chips	5,651,111	474,425	418,819	33,718	580,670	43,124	5,197,900	-8.1
Total All Exports	22,756,589	10,241,859	1,783,585	793,642	1,787,880	776,048	21,433,613	-5.8
Wood Pulp,Total	7,222,258	3,114,419	626,143	190,992	445,301	161,107	6,438,145	-12.5
Cotton Pulp and Other Pulp	115,956	92,001	13,162	9,271	12,849	7,316	127,502	10.5
Waste and Old Paper	6,447,855	643,516	484,702	42,388	523,499	44,960	5,871,507	-8.4
Paper, Board & Products,Total	8,970,720	6,391,924	759,568	550,991	798,432	562,665	8,996,458	-0.7
Paper,Paperboard,Wet Machine Bd. & Construction Paper & Board	7,669,285	4,306,067	615,020	344,278	668,891	357,783	7,427,847	-2.7
Paper, Ppbd & Prod ex Cnst&WMB	8,946,054	6,379,472	757,241	549,952	783,794	561,554	8,969,111	-0.7
Paper & Paperboard, Only	7,534,619	4,292,615	612,704	343,236	666,054	356,671	7,400,300	-2.7
Paper, Total	2,635,060	2,061,358	221,679	172,001	219,322	174,976	2,578,590	-1.4
Newsprint	1,022,756	487,357	84,878	44,350	87,500	45,536	996,709	-1.4
Printing & Writing	1,158,188	1,022,740	91,082	79,640	85,097	77,685	1,132,289	-2.2
Uncoated Groundwood	116,020	82,732	12,432	8,430	9,133	6,825	115,442	-4.3
Clay Coated Paper	360,797	304,899	27,140	21,908	24,932	21,253	339,552	-4.1
Uncoated Free Sheet	448,985	446,094	31,952	33,578	33,366	36,212	428,548	-4.0
Other Printing & Writing	232,386	189,215	19,558	15,827	17,866	13,895	248,749	5.5
Total Pkg. & Other Paper	381,842	483,062	31,424	41,579	30,296	42,740	381,439	1.4
Unbleached Kraft	141,106	73,814	11,774	6,155	10,170	6,887	129,836	-8.0
Other Pkg. & Indust. Paper	240,736	409,247	19,650	35,425	20,128	37,183	251,604	7.8
Tissue	72,274	88,230	4,297	6,431	6,428	9,018	68,153	-5.1
Paperboard, Total	4,899,559	2,231,227	391,025	171,236	436,731	181,896	4,821,710	-3.3
Bolid Wood Pulp	4,857,574	2,094,365	370,042	158,796	417,458	170,524	4,648,557	-4.1
Total Linerboard	3,224,393	1,107,369	233,551	71,922	286,022	78,928	2,910,581	-11.8
Bleached Kraft Linerboard	65,802	37,914	1,855	1,188	959	899	13,598	-82.0
Unbleached Kraft Linerbd	3,158,792	1,069,456	231,695	70,734	284,063	78,229	2,896,988	-10.1
Other Unbleached Kraft	396,833	211,183	36,396	18,214	43,288	18,399	523,432	20.4
Other Bleached Kraft	958,949	751,904	83,390	84,239	89,544	70,074	1,002,060	4.8
Semi-Chemical Corrugating	75,598	23,928	16,703	4,420	9,804	3,124	107,484	34.3
Recycled Paperboard	241,965	136,882	20,983	12,440	19,273	11,171	273,153	10.8
Convtd Paper&Paperbd Products	1,411,436	2,086,857	144,537	206,718	127,740	204,832	1,568,811	10.1
Paper Products, Total	638,804	1,347,861	75,189	138,558	89,749	132,899	709,902	10.2
Paperboard Products, Total	772,632	739,295	69,348	88,158	67,991	72,183	859,009	10.1
Wet Machine Board	883	299	0	0	0	0	990	-34.9
Construction Paper & Board E	23,783	12,164	2,316	1,039	2,838	1,112	26,857	5.5
Notes								
Other: No Weight Avail. ($000)		77,411		8,393		8,838	86,317	10.8
Total Exports Incl. Other($000)		10,319,270		800,034		784,887	9,634,789	-7.7

SOURCE: Bureau of Census, U.S. Department of Commerce. E - Incl. estim. of tonnage based on square foot data.
(1) Annual Rate Year-To-Date is in tons unless otherwise specified in item description.

PRODUCER PRICE INDEXES 1982 = 100	YEAR 1991	YEAR 1992	AUG 1993	SEP 1993	OCT 1993	NOV 1993	Annual Rate Y-T-D 1993	% Change from same Period Last Year
Pulp, Paper and Products except Building Grades	129.8	129.2	127.1	126.7	126.9	126.9	127.6	-1.2
Pulp Paper & Products, ex. Building Grades & ex. Waste Paper *	129.9	129.4	127.3	126.9	127.2	127.2	127.8	-1.3
Total Wood Pulp	119.2	118.9	102.4	102.1	99.6	98.7	104.8	-12.1
Total Paper	127.0	123.2	124.6	124.4	124.1	123.7	123.8	0.5
Writing Paper, exc. Newsprint	124.8	120.2	121.8	121.8	121.3	120.5	120.5	0.2
Newsprint	120.9	110.0	112.6	111.0	110.6	110.7	112.1	1.9
Total Paperboard	130.2	134.3	127.6	127.9	129.6	130.5	130.0	-3.3
Total Paper and Paperboard *	128.0	126.7	125.5	125.5	125.8	125.8	125.7	-0.8
Converted Products	134.8	134.8	133.3	132.5	132.9	133.1	133.8	-0.8
Waste Paper	121.3	117.4	114.8	112.8	112.1	107.4	119.2	8.0
All Commodities	116.5	117.2	118.8	118.7	119.1	118.9	118.9	1.5
Industrial Commodities	116.5	117.4	118.9	118.8	119.4	118.8	119.1	1.5

SOURCE: Producer Price Indexes: Bureau of Labor Statistics, U.S. Department of Labor * Computed by AFPA

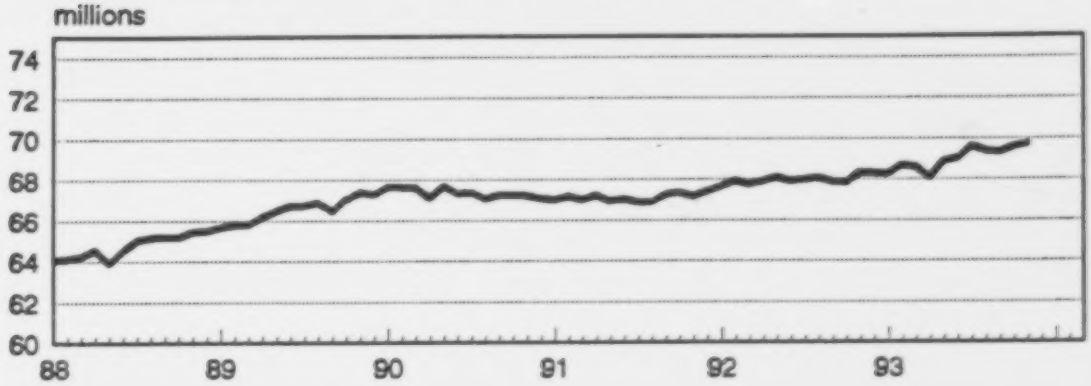
ANNUAL CAPACITY GROWTH



Source: AF&PA Inc. p=projection

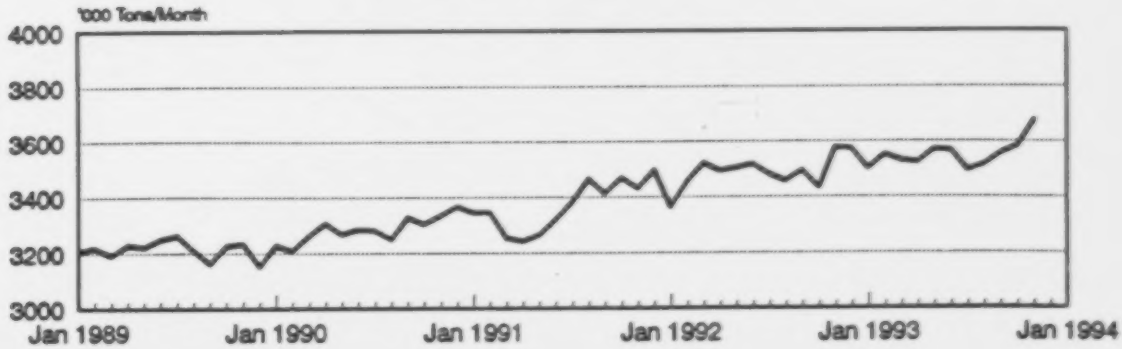
The strong gains in domestic consumption of printing-writing papers appear to have been attributable to (1) an acceleration in white collar employment growth (see graph) and (2) a selective firming in advertising markets. Advertising expenditures data, as compiled by McCann-Erickson and adjusted for price changes by AF&PA, suggest that magazine advertising activity rose some 4% last year, while direct mail advertising volume was up 6%. Newspaper advertising activity rose an estimated 2.3% based on deflated advertising revenues.

White Collar Employment Patterns



Paperboard: Seasonally-adjusted paperboard production has trended higher since August of 1993, obtaining a record high annualized rate of 43.5 million tons in the October-November period. The pickup was prompted by increased domestic packaging demand and an limited improvement on the export front. In particular, paperboard production for export rebounded to an annual rate of 4.4 million tons in the October-November period, versus a year-to-date average annual rate of 4.1 million tons.

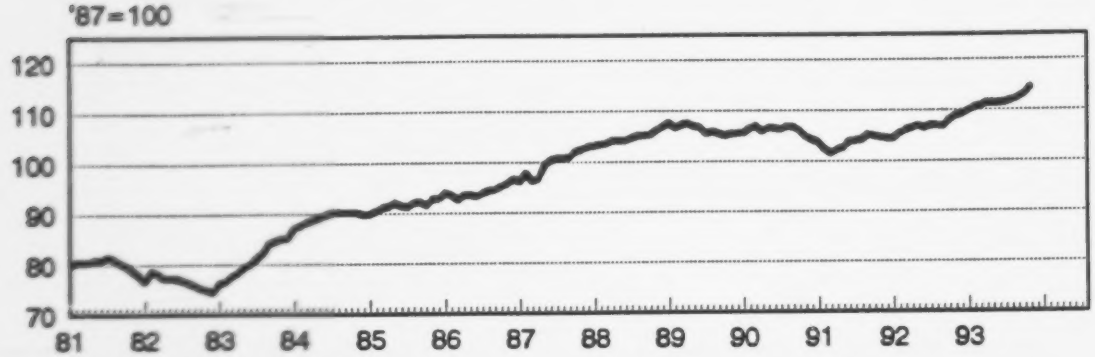
PAPERBOARD PRODUCTION
seasonally adjusted



U.S. manufacturing activity gained significant strength during the closing months of 1993 with attendant benefits for fiber box shipments and containerboard production. Box shipments surpassed their year-ago volume by 7.8% in the September-November

period, lifting their year-to-date increase to 4.1%. The pickup in manufacturing activity as measured by the Federal Reserve Board is depicted by the chart below:

MANUFACTURING OUTPUT

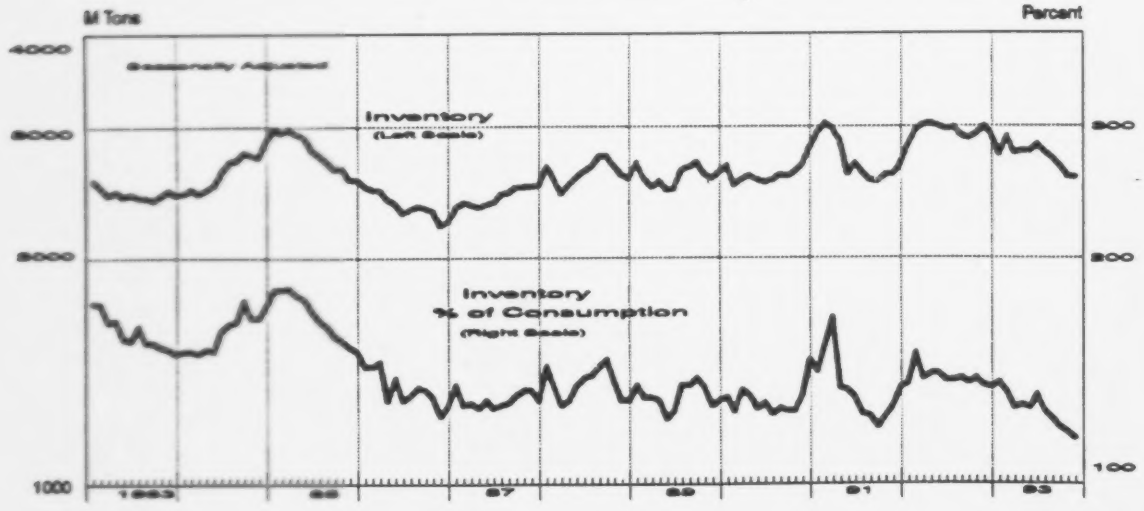


U.S. containerboard production was up a relatively slim 0.9% through November of 1993, far shy of the year's robust increase in fibre box demand. Two factors were responsible for the sluggishness – inventory drawdowns and weak export demand through most of the year.

Roll stocks at mills and box plants, which are plotted on a seasonally-adjusted basis by the following graph, were reduced by some 526,000 tons during the first eleven months of 1993, versus a 165,000 ton expansion during the corresponding 1992 time frame. The net swing of 691,000 tons reduced 1993 containerboard growth by about 2.4 percentage points in 1993. Additionally, had exports remained at 1992 levels, containerboard production would have been 0.7 percentage points higher in 1993.

CONTAINERBOARD INVENTORY

Mill and Box Plant



Boxboard production, which was less subject to the headwinds of inventory drawdowns and soft foreign markets than containerboard demand, posted a robust 4.6% gain through November of 1993. In the most recent three-month period for which data are available (September-November), output of boxboard was up 5.6% relative to year-ago.

Production of boxboard for export was up 2.8% through November, with the principal gains coming from the unbleached kraft folding segment.

CAPACITY SURVEY HIGHLIGHTS

AF&PA's 1993 Capacity Survey reports that the industry plans to expand capacity to produce paper and paperboard by 5.3 million tons between 1994 and 1996, yielding an average annual growth rate of 1.9%. During the previous ten years, capacity expanded at an average annual rate of 2.5%.

Wood pulp capacity is expected to grow 0.6% a year in the 1994-96 period, versus 1.9% a year during the previous decade. These plans are consistent with a scenario of restrained economic expansion. Individual grade highlights are as follows:

Newsprint. U.S. newsprint capacity will decline from 7.3 million annual tons in 1992 to 7.2 million tons this year and is expected to remain at that level over the three future years covered in this survey.

Printing and Writing Papers: Capacity for this category is projected to grow at a 1.9% annual rate in the 1994-96 period, down from 3.5% growth in the prior ten years. Growth during the projection period will be fastest for uncoated free sheet --2.4% a year -- and slowest for uncoated and coated groundwood 1.1% and 1.2% a year, respectively.

Tissue Papers: Back-to-back capacity increases of 2.7% and 1.9% in 1992 and 1993 will bring the industry potential to produce tissue products to 6.5 million annual tons this year. During the upcoming three years, growth in capacity is expected to average 1.9% a year.

Packaging & Industrial Converting: Pulled down by reductions in unbleached kraft paper capacity, overall capacity to produce packaging and industrial converting papers declined 1.5% in 1993 and is projected by the Survey to trend up 0.6% a year in the upcoming three years.

Containerboard: While capacity for containerboard as a whole is reported to expand at a comparatively modest 2.2% average annual rate over the three-year period 1994-1996, recycled grades are expected to expand at a 10.1% annual rate and to account for almost 70% of the total anticipated gain of 2.1 million annual tons.

Solid Bleached Paperboard: The start-up in late 1993 of a new solid bleached paperboard machine and the expected start-up of a second new machine in 1995 will contribute to capacity gains totalling 639,000 tons yielding an average annual growth rate for the projection period (1994-96) of 4.1% a year.

Recycled Paperboard (other than containerboard): This category includes folding carton, set-up, gypsum wallboard facing and other packaging and non-packaging grades. Capacity increased by 0.9% in 1993 to 7.7 million tons and is projected by the Survey to expand at a 1.2% average annual rate over the forecast period.
Market Pulps: Net capacity to produce bleached sulfate market pulp declined by 32,000 annual tons in 1993, and is reported to decline by a further 160,000 annual tons by 1996. These reductions reflect idled mills and the integration of market pulp to on-site papermaking.

Continuing a trend reported in our survey last year, market pulp manufactured from recovered paper is gaining industry-wide acceptance, and capacity to produce these pulps is expanding at a rapid rate. From a potential for 424,000 tons per year in 1992, respondents to this survey report plans to expand capacity to 1.7 million tons per year in 1996.

Copies of the Survey have to sent to member companies and are available to non-members for $375 (domestic) and $395 (overseas).

MONTHLY STATISTICAL SUMMARY INSERT
VOL. 71, NO. 12
DECEMBER, 1993

PRODUCTION

(000 TONS)	(P) NOV 1993	(R) OCT 1993	NOV 1992	FIRST ELEVEN MONTHS 1993	FIRST ELEVEN MONTHS 1992	% CHANGE YR TO DATE 1993/1992
PAPER GRADES						
Newsprint	594	609	591	6,499	6,497	0.0
Printing & Writing	1,962	2,014	1,911	21,944	21,472	2.2
Uncoated Groundwood (s)	147	161	147	1,594	1,472	8.3
Coated Groundwood (s)	347	333	367	3,945	3,987	-1.1
Coated Free Sheet (s)	319	340	316	3,577	3,453	3.6
Total Coated Paper (s)	666	674	683	7,522	7,440	1.1
Uncoated Free Sheet Paper (s)	1,011	1,037	963	11,360	11,184	1.6
Thin Paper (s)	13	14	16	143	160	-10.7
Cotton Fiber Paper (s)	13	14	12	150	147	2.3
Bleached Bristols (s)	112	114	90	1,175	1,068	10.0
Tissue Paper	498	518	493	5,494	5,302	3.6
Total Pkg & Other Paper	391	398	395	4,260	4,351	-2.1
Unbl. Kraft Paper (s)	190	187	210	2,077	2,202	-5.7
Bl. Kraft Paper (s)	34	37	31	369	370	-0.3
Specialty Pkg. Paper	59	67	54	659	631	4.4
Special Industrial Paper	109	107	99	1,155	1,148	0.7
TOTAL PAPER	3,445	3,539	3,389	38,197	37,622	1.5
PAPERBOARD GRADES						
Unbleached Kraft Paperboard	1,814	1,818	1,738	19,594	19,822	-1.2
Unbleached Kraft Linerboard *	1,700	1,698	1,608	18,210	18,449	-1.3
Other Unbl. Kraft Paperboard	115	120	130	1,384	1,373	0.8
Semichemical Paperboard	489	493	487	5,391	5,401	-0.2
Bleached Paperboard	387	371	368	4,190	4,117	1.8
Recycled Paperboard	909	950	875	9,969	9,042	10.3
TOTAL PAPERBOARD	3,598	3,632	3,469	39,145	38,381	2.0
TOTAL PAPER AND PAPERBOARD	7,044	7,171	6,858	77,341	76,003	1.8

(000 SHORT TONS)	NOV 1993	OCT 1993	NOV 1992	FIRST ELEVEN MONTHS 1993	FIRST ELEVEN MONTHS 1992	% CHANGE YR TO DATE 1993/1992
U.S. MARKET PULP SHIPMENTS						
Total	710	729	564	7,608	7,562	0.6%
Total Sulfate	686	713	546	7,430	7,339	1.2%
Bleached Sulfate	670	701	537	7,251	7,189	0.9%
Softwood	382	423	323	4,359	4,303	1.3%
Hardwood	288	278	214	2,893	2,886	0.2%
Unbleached	17	12	9	179	150	19.4%
Sulfite, Bleached and Unbleached	24	16	18	178	224	-20.6%
CONSUMPTION OF FIBROUS RAW MATERIALS AT PAPER & PAPERBOARD MILLS						
Wood Pulp	5,232	5,336	5,059	56,998	56,873	0.2%
Recovered Paper	2,273	2,323	2,205	24,869	23,216	7.1%

* Includes all unbleached kraft paperboard exports

(s) - Shipments
R - Revised
P - Preliminary

AMERICAN FOREST & PAPER ASSOCIATION
1111 19th Street, N.W.
Washington, D.C. 20036

INDUSTRY DATA January 11, 1994	1991	1992	1993	1993 R	1993 P	Ann. Rt. ytd '93	% Chg. 93/92
PAPER & PAPERBOARD — Tons (000)			Sep	Oct	Nov		
Total Production (AFPA)..... : excluding :	79,499	82,941	6,958	7,171	7,044	84,372	1.8
Total Seasonally Adjusted..... : construction :			6,979	6,953	7,220	84,252	2.0
Imports (including Products)..... : and wet :.....E	12,074	12,406	1,127	1,258	1,180	13,863	11.8
Exports (including Products)..... : machine :.....E	8,311	8,946	757	784	784	8,987	-0.4
Apparent Consumption..... : grades :.....E	83,261	86,401	7,349	7,427	7,636	89,128	3.8
Paper Production % Tonnage Capacity	89.3	91.1	90.8	91.4	91.5	91.9	
Paperboard Production % Tonnage Capacity	93.6	94.4	94.4	93.6	95.2	94.0	
PAPER, PAPERBOARD & PRODUCTS			Sep	Oct	Nov		
Imports.....:Including Construction and :.....E	12,167	12,543	1,141	1,271	1,193	14,006	11.7
Exports.....: WMB Grades (excl. HPB) :.....E	8,331	8,971	760	786	767	9,015	-0.3
Market Wood Pulp Shipments – Tons (000)	701	8,291	656	729	710	8,300	0.6
Wood Pulp Imports – Tons (000).....E	409	4,882	403	444	436	5,353	9.1
Wood Pulp Exports – Tons (000).....E	500	6,421	456	401	451	5,756	-10.8
Raw Materials Consumption – Tons (000)							
Wood Pulp.....:consumption for:	56,116	56,873	4,931	5,336	5,232	62,180	10.0
Recovered Paper.....:construction & :	20,955	23,216	2,273	2,323	2,273	27,129	16.4
Total..... : WMB grades :	77,070	80,089	7,204	7,659	7,506	89,309	12.4
Pulpwood Consumption Cords (000) Amer. Pulpwd. Assn. *	96,242	104,598	8,547	8,646	8,678	105,146	1.1
Employment (000)			Sep	Oct	Nov		
Paper and Allied Products..RS.....Total	687.9	687.3	681.2	677.0	675.8	680.6	-1.0
Pulp, Paper and Board Mills..RS.....Total	244.3	238.8	233.0	230.5	230.3	233.8	-2.2
Avg. Hourly Earnings of Production Workers ($)							
Paper and Allied Products..RS	12.72	13.07	13.67	13.55	13.56	13.40	2.7
Pulp, Paper Mills.....RS	15.86	16.19	17.16	17.04	16.97	16.69	3.2
Paperboard Mills.....RS	15.71	16.24	17.14	17.00	17.00	16.73	3.2
New Plant & Equip. Expenditures, Paper & Allied Prod.			IVQ '92	IQ '93	IIQ '93		
(Rept. by US Dept. of Com., Ann. Rates, Bill.$)*	11.50	10.53	10.60	10.60	10.27	10.55 Y	0.2
Index of Output per Man–Hour (1982=100)			Sep	Oct	Nov		
:In Pulp, Paper:...Production Workers	105.5	113.2	114.3	117.4	122.0	105.6	-6.5
:and Board Mills:...All Employees	105.2	112.9	114.5	117.5	121.9	105.3	-6.5
Paper & Allied Products (Million $)							
Industry Shipments (Dept. of Commerce)*	128,757	131,282	10,889	10,691	10,809	129,456	-1.2
Pulp, Paper and Paperboard*	53,660	53,442	4,305	4,295	4,347	52,173	-2.4
Inventories (End of Period) – Total Industry*	13,544	13,387	13,600	13,579	13,510	13,510	-1.5
Pulp, Paper and Paperboard*	5,493	5,535	5,792	5,809	5,803	5,803	0.3
Paper & Allied Products Companies (Million $)			IVQ '92	IQ '93	IIQ '93		
Sales (Corporations Only)	122,969	127,562	31,873	31,865	33,187	130,104	3.8
Earnings-(Corporations Only)	2,164	1,213	121	686	814	3,000	309.8
Depreciation (Corporations Only)	6,504	6,974	1,771	1,800	1,868	7,336	5.6
Net Worth (Corporations Only)	48,642	47,520	47,520	47,873	47,838	96,711	1.1
Price Indexes (Bureau of Labor Statistics) 1982=100			Sep	Oct	Nov		
Pulp, Paper & Products, ex. Building Grades	118.7	118.5	126.7	126.9	126.9	127.6	-1.2
Wood Pulp	108.1	109.6	102.1	99.6	98.7	104.8	-12.3
Waste Paper	110.2	108.2	112.6	112.1	107.4	119.2	1.0
Paper	116.1	112.8	124.4	124.1	123.7	123.8	0.6
Paperboard	119.1	123.2	127.9	129.6	130.5	130.0	-3.3
Paper Demand (Indexed: 1987=100)			Sep	Oct	Nov		
Total Paper Production *	105.9	110.8	111.2	109.6	115.2	112.7	1.9
Paper New Supply *	99.6	102.5	104.1	106.4	108.6	106.6	4.3
Demand Indicators – (Weighted Average) *	101.6	101.0	101.2	101.3	101.7	101.2	0.4
Production of Nondurable Goods..RS.....*....(21.2%)	104.1	106.5	106.9	107.1	107.7	106.9	1.2
Disposable Income.....*....(23.9%)	107.3	110.4	113.3	113.7	114.2	112.3	2.2
Total Printing and Publishing..RS.....*....(54.9%)	96.8	96.0	93.7	93.6	93.9	94.2	-0.8
Paperboard Demand (Indexed: 1987=100)			Sep	Oct	Nov		
Total Paperboard Production *	108.0	111.9	114.0	114.8	117.8	113.9	2.0
Production for Domestic Use .....E	105.4	109.6	113.5	113.0	115.5	112.4	2.7
Demand Indicators – (Weighted Average) *	104.0	106.5	110.3	111.3	112.2	110.1	3.6
Production of Consumer Goods..RS.....*....(62.06%)	102.8	105.2	107.9	109.1	110.0	108.2	3.0
Production of Equipment..RS.....*....(5.75%)	108.9	112.7	122.8	123.5	124.8	120.8	7.5
Production of Materials..RS.....*....(32.19%)	105.5	107.9	112.8	113.4	114.3	112.0	4.0
Market Data			Sep	Oct	Nov		
Newsprint Consumption (SAAR) – Tons (000)...R.....E	12,585	12,799	12,599	12,809	12,965	12,863	0.5
Newspaper Pub. and Printing Empl. Total(000)	459	451	452	452	454	452	0.2
Magazine Advertising Pages (PIB, Inc.)	160,224	168,561	11,429	15,803	17,177	167,514	-0.3
Wholesalers Sales and Inventories (Million $)							
Total Paper & Pap. Prdcts.,ex Wallpaper..Sales	49,297	48,039	4,627	4,807	4,818	49,311	12.1
Inventories (End of Period)	3,954	4,203	5,370	5,597	5,311	5,311	23.9
Fibre Box Data (Fibre Box Association)			Sep	Oct	Nov		
Fibre Box Shipments (Million square feet)	320,106	335,696	29,833	32,307	28,713	352,232	4.1
Container'bd Inventory at Mill & Plant (000 Tons)	2,670	2,918	2,572	2,378	2,388	2,388	-15.4
Retail Trade (Billion $)							
Total Retail Sales *	1,885	1,956	174.7	178.5	179.1	2,074	6.4
Nondurable Goods Stores Sales *	1,212	1,253	109.2	110.0	109.9	1,299	4.0
General Economic Data			Sep	Oct	Nov		
Total Industrial Production (Index 1987 = 100)*	104.1	106.5	111.4	112.2	113.2	110.8	4.2
Producer Prices (All Commodities, Index: 1982=100)	106.6	107.6	118.7	119.1	118.9	118.9	1.4
Consumer Prices (All Items–Urban Con.) (1982–4=100)	136.2	140.3	145.1	145.7	145.8	144.3	3.0
Gross Domestic Product – Annual Rate (Billion$) *			IQ '93	IIQ '93	IIIQ '93		
G.D.P. or Expenditure – Current $	5,722.9	6,038.5	6,261.6	6,327.6	6,396.3	6,328.5	5.7
G.D.P. or Expenditure – 1987 $	4,861.4	4,986.3	5,078.2	5,102.1	5,138.0	5,106.1	3.0
Paper & Paperboard Consumption – Pounds per Capita	659	677				694	

N.M. = Not Meaningful. R = Revised RS = Revised Series E = May est. by AFPA. Y = Full year 1993. * = Seas. Adj. N.A. = Not Available. SAAR = Seas. Adj., ann. rate.